DOCUMENT RESUME

ED 066 668 CG 007 276

AUTHOR Lerner, Richard M.

TITLE Some Implications of Body Build Stereotypes for the

Development of Body Concept and Interpersonal

Relations.

INSTITUTION Eastern Michigan Univ., Ypsilanti.

PUB DATE Apr 72

NOTE 17p.; Paper presented at Symposium on "Body and Behavior in Children" at the 43rd Annual Meeting of

Eastern Psychological Association, April, 1972,

Boston, Massachusetts

EDRS PRICE MF-\$0.65 HC-\$3.29

DESCRIPTORS *Behavioral Science Research; *Body Image; Growth

Patterns; Human Body; *Human Relations;

*Interpersonal Relationship; Kinesthetic Perception;

Physical Characteristics; Physical Development;

Relationship; *Self Concept

ABSTRACT

In this paper the author tries to indicate, through a review of his research, that the scope of the study of body build stereotypes has been broadened to address the larger issues involved in assessing some of the implications of body build stereotypes for the development of body concept and interpersonal relations. Among the topics discussed are: (1) how might the inculcation of body build stereotypes provide a source of behavior/personality development, (2) are there differences in this area between males and females, (3) methodological issues, and (4) body build stereotype development and body concept. This is followed by a discussion of some implications of body build stereotypes for interpersonal relations. The author asks what is the relation between the attitudes that people hold toward others having fat, thin, or average body types and the behavior shown toward these physique groups. Several questions are presented and the author presents the findings of one research direction. (BW)

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGINATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

Lerner

1

SOME IMPLICATIONS OF BODY BUILD STEREOTYPES FOR THE DEVELOPMENT OF BODY

CONCEPT AND INTERPERSONAL PELATIONS 1

Richard M. Lerner

Eastern Michigan University

The initial impatus for the study of the attitudes that people hold toward various body types arose out of an attempt to provide a social learning interpretation for the body build-behavior relations reported in several studies, for example, those reported by Walker in 1962 and 1963. Through formulating the process by which the social inculcation of such "body build stereotypes" might provide a source of reported physique-behavior relations, it was hoped that a tenable alternative might be offered to Sheldon's (1940, 1942) basically preformistic, constitutional position. Current studies of body build stereotypes have, however, became functionally autonomous form their initial impetus. As I will try to indicate in this paper, through a review of my research in this area, the scope of the study of body build stereotypes has been broadened to address the larger issues involved in assessing some of the implications of body build atereotypes for the development of body concept and interpersonal relations. The social inculcation position: Studies of the "first premise"

How might the inculcation of body build stereotypes provide a source of behavior/personality development? The initial formulation of what Lerner and Gellert (1959) termed the "social inculcation hypothesis" had two components. First, it was held that people in a

¹ Paper presented at Symopsium on "Body and Behavior in Children," at the 43rd Annual Meeting of Eastern Psychological Association, Boston, Massacusetts, April, 1972.

child's socializing environment maintain different sets of expectancies about behavior associated with various physique types. Second, it was implied that these stereotypes in some way provide a direct source of behavior/personality development.

Several studies were conducted in an attempt to verify the first permise of this "direct formulation" of the soical inculcation hypothesis. To ascertain the presence of body build stereotypes a rather direct, simple methodology was employed. In my first study (Lerner, 1969a) three age groups of males, a 10 year-old, a 15-year old, and a 20 year-old group, were presented with duplicates of picutres representing an adult male Endomorph, Mesomorph, and Ectomorph, copied from Sheldon (1942). Subjects, tested individually, were also presented with a list of 30 behavioral descriptions, adopted from a previous study (Brodsky, 1954). The subject was told that each picture was of a different man. Each picture was assigned a number, "1," "2," or "3," and the subject was simply told to put the number of the man that "best fit" each phrase on a line that appeared to the left of that phrase.

No significant differences were found in the attribution of behavioral descriptions to physique types between age levels, and responses from all three age groups were therefore combined for further analysis. The results of the X² analyses for each item indicated that the Mesomorph was associated with items that could be judged socially "positive," e.g., assume leadership, have many friends, make the best athlete, be elected leader, be most wanted as a friend. On the other hand, the Endomorph and the Ectomorph were associated with items which could be termed socially "negetive." For example, some Endomorph items were: be the poorest athlete, have fewest friends, be least likely to be chosen

leader; and some Ectomorph items were: be most likely to have a nervous breakdown, make a poor father. These findings were consistent with the independent results of another investigator (Staffieri, 1967), who in studying 5 to 10 year-old boys found a common positive Mesomorph stereotype and negative Endomorph and Ectomorph stereotypes to exist. The findings of both of these studies thus supported the first premise of the social inculcation hypothesis, that is, a common body build stereotype appeared to exist in males ranging in age from 6 through 20 years.

But what about females? They certainly play an important role in a child's socializing environment, and their body build stereotypes would have to be very similar to those found with males if the social inculcation hypothesis would remain tenable. Accordingly, in my next study (Lerner, 1969b) 90 female college students, ranging in age from 15 to 40 years were studied, using the same method as in my previous study. For both the former and the present investigation the body types associated with 23 of the 30 items were identical, and for 5 of the remaining 7 items the stereotype varied from being associated with both the Endomorph and the Ectomorph in the former study to being attributed to either of these body builds in this second study.

Both of these studies than support the hypothesis that the negativepositive dimension of body build stereotypes is generalizable across
the age and the sex of the attributer. In fact, the results of other,
independent investigations of body build stereotypes (e.g., Brodsky, 1954;
Wells & Siegel, 1951) allowed one to infer that the evaluative dimension
of body build stereotypes is also generalizable across race and geographical area of residence within the United States. But what about outside of the boundaries of the United States? In another study I conducted



(Lerner & Pool, 1972), again using the same basic method, the body build stereotypes of 135 Mexican children were assessed. The children had a mean age of 12.5 years and the SD for age was 2.1 years. Here too, the same general findings emerged. The Mexican children made negative Endomorph and Ectomorph attributions and positive Mesomorph attributions.

Methodological issues. However, before one can unequivocally assert that the first premise of the social inculcation position is confirmed, that is, before one can assert that people in a child's socializing environment do maintain common sets of expectancies associated with specific body types, cercain methodological problems must be considered. First, all previous investigations of body build stereotypes studied these attitudes through the use of forced-choice verbal checklist. Thus, the works comprising these stereotypes: were "imposed" upon subjects. However, if the social inculcation of stereotypes is to effect personality/behavior development of young children, it must be shown that an experimentally unimposed awareness of physique-associated attitudes exists.

Thus, an assessment (Lerner & Schroeder, 1971a) of words that kindergarten children actively use in describing fat and thin children was made. The 76 kindergarten subjects of this study individually received a structured, open-ended interview assessing attitudes towards these body types. Questions such as "What does it mean to be a fat (or thin) boy?" and "What would a fat (or thin) boy be like?" were used. An inductive content analysis indicated that all responses could be categorized into one of three content categories: Physique and physical, Social, and Personal, and an irrelevant statement category. Statements were independently categorized by two raters; interrater agreement was 96%. Significantly more content category that irrelevant statements



were made about each body build, respectively, and also for both body build types significantly more statements were classified into the physique and physical category than the other two content categories. Most important however, the words used in making the content category statements appeared consonant with those words imposed in the above-described studies. This study's data indicated a conceptual convergence between previous studies and the present one; methods used in both types of studies yielded results indicating an awareness of body build attitudes in young children, an awareness that was consistent with the previously found negative-positive dimension of body build stereotypes.

A second methodological issue should also be noted. Previous studies indexed the development of body build stereotypes through the use of group frequency data. That is, a stereotyped item attribution occurred when a significant proportion of subjects in a group designated a particular item as "best fitting" a physique stimulus. Although the results of studies using this approach have been seen to be strikingly consistent, the relative strength and quality, that is, what I call the "richness," of the stereotypes of individual subjects had not been reported. To what extent is group stereotype data representative of the individual stereotype responses comprising the group data? To answer this question it was necessary to conduct within-subject analyses of these attitudes among subjects whose grouped data clearly indicated the existence of the typical stereotypes. As part of a larger study of body build stereotype development, to be discussed in more detail below, the present study addressed this issue.

Three groups of 50 white, middle-class males were studied, a .5 yr - old, a 15 yr - old, and a 29 yr - old group. A Verbal Check



List, comprised of 56 itmes, half having a positive evaluative connotation and half having a negative evaluative connotation, was individually presented to each subject. Subjects were first asked to attribute each item to one of three stimulus figures, representing Endomorph, Mesomorph, and Ectomorph body builds. Subjects were then asked to judge each item in terms of its good-bad evaluative connotation.

Data were analyzed by computing several fixed effects analyses of variance. The strength of the stereotype toward each physique was indexed by the number of items attributed to each physique. This analysis indicated that the strength of the Mesomorph stereotype was greatest, the strength of the Endomorph stereotype was next greatest, and the strength of the Ectomorph stereotype was least great. An analysis of the "relative goodness" of the stereotype, i.e., the number of good attributions to a physique made by a subject divided by his total number of attributions to that physique, indicated that the Mesomorph was judged as being most good, while the relative goodness score for both the Endomorph and the Ectomorph were significantly lower. Thus, the analyses of the relative strength and quality, i.e., the richness, of body build stereotype development indicated that individual stereotype responses are accurately represented by group stereotype date; the generally favorable view of the Mesomorph and the relatively unfavorable views of the Endomorph, and less so, the Ectomorph, were consistent with the findings of previous research.

In sum of all the research considered to this point then, this body of information indicates that the evaluative parameters of body build stereotypes are generalizable across such variables as age (Lerner & Korn, in press; Staffieri, 1967), race (Brodsky, 1954), sex of subject



(Lerner, 1969b; Lerner & Schroeder, 1971a), sex of target stimulus (Staffieri, 1972), subjects' geographical area of residence both within and without the boundaries of the United States (Lerner & Pool, 1972), method of response elicitation (Lerner & Schroeder, 1971a), and mode of data analysis. Thus, although these findings are consistent with the direct formulation of the social inculcation hypothesis, they do not, in any way, support or clarify the second premise of this hypothesis; that is, how the inculcation of body build stereotypes provides a direct source of behavior/personality development ramains unknown.

Body Build Stereotype Development and Body Concept

To formulate this second premise more precisely some other issues must be considered. Research dealing with the social-inclulation hypothesis has not investigated the differential impact of the inculcation of positively and negatively evaluated stereotypes toward physique. What is the effect of a person's having negative evaluation toward his own physique upon the way he perceives himself and others and upon his body concept? Two developmental possibilities suggest themselves. First, the child may conform to the stereotyped behaviors expected of him, creating a self-fulfilling prophecy. Such "direct" shaping is what the previous formulation of the social-inculcation hypothesis apparently predictd. Not previously considered, however, is a second possibility open to the child, one which may broaden the focus of this topic. That is, the child may reject any association between the sterectyped behaviors expected of him and his own behaviors. If this alternative were adopted, then one would expect the child to: (1) deny association between his own behavior and those stereotyped behaviors attributed by himself and others to others of his physique; (2) identify himself with

those behaviors attributed to a more favorable body build; and (3) show evidence of preferring to have a physique other than his own. This formulation, in emphasizing not the direct inculcation of behavior, but rather the indirect effects of the stereotypes upon body concepts, allows one to look at some possible concomitants of having an undesirable physique. Although this second hypothesis also involves social inculcation, it implies that through the study of how people perceive parameters of both their own and others' physique, a specification of the possible influences that body-build stereotyping may have for personality development in general may be made.

Thus, Lerner and Korn (1972) attempted to assess some of these implications of body build stereotyped development for the development of body concept. As described above, in the richness analysis study, three age groups of males were studied, a 5-, a 15-, and a 20-year old group. Each Age Group included 30 chubby males and 30 average build males. A 55 item Verbal Check List, containing adjectives or short phrases as items, was especially constructed and used in each of the 3 individually administered tasks that were presented to each subject in the first testing session. All works or phrases in the check list items were in the active vocabulary of the youngest subjects, half the items had a positive evaluative connotation and half had a negative one, and for each item one opposite in meaning and/or connotation. existed. First, each subject was asked to attribute each item to either a side-view figure drawing of an Endomorph, a Mesomorph, or an Ectomorph. Second, the subject judged each item as having either a "good" or "bad" evaluative connotation. Third, the item pairs were presented and the subject had to say which item of the pair was most



like him. In the second testing session, each subject was shown the 3 body build stimuli and was asked to choose the stimulus he most looked like and most wanted to look like.

Again, it was found that subjects at all age levels maintained an almost totally positive Mesomorph stereotype, an overwhelmingly negative Endomorph stereotype, and a quantitatively smaller but still negative Ectomorph stereotype. Most interestingly, the nature of these stereotypes did not vary as a function of the subjects' body types; that is, both chubby and average build subjects shared common body build stereotypes.

At each age level both chubby and average subjects view the Endomorph unfavorably and the Mesomorph favorably. The question thus arises as to whether males with a given physique tend to describe their own behavior as being similar or dissimilar to the behavioral characteristics associated with the body-build figure similar to their own.

Fiedler (1958) has indicated that the tendency to assume another person to be similar to oneself is indicative of an accepting attitude on the part of the perceiver, while the perception of another as dissimilar indicates a rejecting, distint attitude. If chubby subjects described themselves as more similar to the Mesomorph stereotype than to the Endomorph stereotype, then this would suggest that these subjects have a rejecting attitude toward their own physique and implies a negative body concept.

The assumed-similarity and assumed-dissimilarity scores were derived by determining the number of chech list items each subject attributed to each stimulus figure and the corresponding items (from task 3) selected as being "like his self" or "not like his self." These



numbers were then converted to the percentage of total self- 'n not-self attribution, respectively, for each stimulus figure.

In all age groups, chubby subjects viewed themselves as ha Lag more of the attributes they associated with body types other than the Endomorph. Of the items chubby subjects in all age groups chose a like themselves, only one-thier or fewer were those associated with the Endomorph. In group 5, the chubby and average subjects viewed themselves as having attributes that were as likely to be associated with one or another of the three stimuli. In groups 15 and 20, however, the chubby and average subjects were alike in that they considered about half the items they associated with the Mesomorph as like themselves. The average subjects in these older groups were less likely to consider the Endomorph attributes like themselves than the chubby subjects. This same general pattern was seen in the items subjects considered not like themselves (assumed dissimilarity). In group 5 almost half the items rated as not like themselves were those associated with the Endomorph. Both chubby and average subjects considered Mesomorph attributes least frequently as not like themselves. This response to Mesomorph attributes was also seen in the two older groups. In groups 15 and 20 the pattern of responses was quite similar, although chubby and average subjects did differ somewhat. The average subjects consedered almost half the Endomorph attributes as not like themselves, while chubby subjects considered more of the Ectomorph attributes as not like themselves.

In terms of Fierler's (1958) work these data suggest that chubby subjects maintain a rejecting, negative valence toward their body build. While showing evidence of aversion for their own build, chubby



males express an affinity (for example, preference) toward a physique other than their own. Thus, in no age group do chubby subjects have their highest assumed-similarity scores associated with the Endomorph, and in all age groups their assumed-dissimilarity scores for the Endomorph are higher than that for the Mesomorph.

The percentages of identification and preference responses to each body build stimulus by the chubby and average subjects in each age group should also be considered. In all groups, average subjects more frequently identify themselves conrectly as Mesomorphs than chubby subjects identified themselves as Endomorphs. In the two older groups about 30% of the average subjects were correct, while only 60% of the chubby subjects were correct. In group 5 the same pattern is evident, although the percentages of correct identification is lower. Of the chubby subjects in group 5, 50% incorrectly chose the Mesomorph as like themselves, but between groups 5 and 15 a significant increase in correct body-build identification obtained for chubby subjects.

When body-build preferences are examined, almost all of the chubby and average subjects of the two older groups preferred the Mesomorph and none preferred the Endomorph. Significant age differences obtained between group 5 and 15, but not between the two older groups. Thus between groups 5 and 15 we find a significant decrease in preference for the Ectomorph by chubby subjects. The overriding preferences for the Mesomorph in groups 15 and 20 appears incipient in the younger subjects. Moreover, exclusion of the Endomorph in the preference responses is almost universal within the age range sampled.

In sum the indirect-effects formulation of the social-inculcation hypothesis appears best able to account for the results found with both



the chubby and average subjects. Having comparable knowledge of the parameters of body-build stereotypes, subjects having unfavored or favored physiques are differentially affected. The former group rejects the association between the stereotype and their own behavior, describes their behavior as consistent with the stereotype of a more favored physique, prefers to look like the favored physique, and does not identify their own behavior as being similar to the unfavored one. On the other hand, subjects having a favored physique appear to accept the relevance of the stereotype to their own behavior, prefer to have the physique they possess, and accordingly identify their own body build as being most similar to the favored Mesomorph. Thus, it appears that a as an indirect effect of the body-build stereotypes a neagtive body condept is inculcated in chubby children, while in average children a positive body concept is formed. These indirect effects appear to be relatively stable within the age range sampled.

Some implications of body build stereotypes for interpersonal relations

From the above findings we can see some of the implications of body build attitudes for the body concept of chubby and average build children. But, a final issue that I would like to consider arises; that is, what may be some of the implications of these stereotypic attitudes for the interpersonal relations involving children with different physique types? That is, what is the relation between the attitudes that people hold toward others having fat, thin, or average body types and the behavior shown toward these physique groups? Several possible ways exist to explore this general question, and I would like to present the findings of one recent research direction. That is, I would like to present the results of a suudy of the development of personal space



schemata towards body build.

Little (1955, p. 237) has defined personal space as "the area immediately surrounding the individual in which the majority of his interactions with others take place." Operationally, Little (1965), and Meisels and Guardo (1969), other workers in this field, have indexed personal space in terms of the placement of human figure drawings or statuettes (what may be termed a "projective" index of the use of personal space), and by the staging of real actors or actresses. Little (1965) found that the distance placed between members of dyads was influenced by the degree of "liking" attributed to them. The distance between members of the dyads decreased as degree of liking increased. This inverse relation between use of personal space towards a person and degree of psychological or interpersonal closeness has also been obtained with respect to such dimensions as friendly-unfriendly, handicapped-not handicapped, and deviant-not deviant (Meisels & Cantor, 1970; Miesels & Guardo; 1969; Sommer, 1969). Accordingly, it was predicted that if the attitudes that children maintain towards fat, thin, and average physique types do in fact correspond to some dimensions of their interpersonal behavior, then with a projective index of personal space similar to that used by Meisels and Guardo (1969), greatest personal space usage should be seen towards the fat person, next to the thin person, and the smallest personal space usage whould obtain between the average build person and the subject. That is, because the average build person has favorable attitudes maintained towards him, and possesses a physique that way be considered not deviant and not handicapped, the least amount of personal space should be maintained toward him. Conversely, because the fat person, and to some extent the thin



person, is afforded negative attitudes and has a body type that may be considered deviant, or handicapped, greater personal space should be used.

These predictions were tested in a study of four groups of children, kindergarten, first, second, and third grade boys and girls. All subjects were tested individually. A 2 ft. by laft. green felt board was placed in front of the subject. About 6 inches from the base of the board, centrally spaced from either side, was a 12 inch line along which a red 9 inch marker could be moved. Several 9 inch figure drawings were used in the study. First, the experimenter placed a picture of a tree of the left hand side of the center line. The experimenter told the subject that they were going to play a game called "Coming close to things," and demonstrated that the subject could move the marker any place along the line in order to indicate how close he wanted to come to the picture. After it was determined that the subject could perform this task with the tree picture, and another of a teddy bear, the experimenter randomly and successively presented a side-view figure drawing of a male Endomorph, a Mesomorph, or an Ectomorph. After the subject had responsed to all three pictures, the stimuli were presented again, in a different random order, so that response reliability could be assessed.

Response reliability for kindergerten subjects was rather low, averaging about *.4. For the older groups, however, response reliability was moderately high, i.e., about +.6, *.7, and *.7 for the first, second, and third graders, respectively. The results of the personal space measures did, however, appear to support our predictions.

Although at the kindergarten level there was no difference in the



subjects' use of space toward the three body types, the responses of the first and second graders indicated that signficantly more space was used towards the Endomorph than towards the Mesomorph or the Ectomorph. The space used toward these latter two body types was not significantly different. But, the grade three subjects responded in a way that completely supported our predictions, i.e., most space was used towards the Endomorph, less towards the Ectomorph, and least towards the Mesomorph.

Since it is well documented that children from kindergarten on share a common body build stereotype with their older peers (e.g., Lerner & Korn, 1972; Lerner & Schroeder, 1971a), one may infer that the results of this study suggest that there is a lag between the time when body build stereotypes are present and when evidence for behavior correspondences are established, or are in the process of being developed. These results, taken together with the research concerning body build preference and aversion responses (Lerner & Gellert, 1969; Lerner & Korn, 1972; Lerner & Schroeder, 1971b), indicate that even young children show preferences for average physiques and aversion for both chubby and thin body types. Such responses, coupled with the possibility that people's social approach-withdrawal responses, spatial usage, or other interpersonal behavior towards a person is in part dependent on that person's body type, suggest that the course of social development may be very different for a chubby as opposed to an average build child. Although the parameters of these possible differences remain to be explored in future research, I think it is clear from what has been described above, that one's body and the attitudes that are maintained towards it by one's self as well as by others, are important, relevant variables in the areas of personality and social development.

こうこと というとうなるから 大きののなるなるなるないのである

- Brodsky, C. M. A study of norms for body form-behavior relationships. Washington, D.C.: Catholic University of America Press, 1954.
- Fiedler, F. E. Interpersonal perception and group effectiveness. In R. Tagiuri & L. Petrullo (Eds.), <u>Person perception and interpersonal behavior</u>. Stanford, California: Stanford University Press, 1958, 243-257.
- Lerner, R. M. The development of Stereotyped expectancies of body build-behavior relations. Child Development, 1969a, 40, 137-141.
- Lerner, R. M. Some female stereotypes of male body build-behavior relations. Perceptual and Motor Skills, 1969b, 28, 363-366.
- Lerner, R. M. "Richness" analyses of body build stereotype development.

 <u>Developmental Psychology</u>, 1972, in press.
- Lerner, R. M. & Gilbert, E. Body build identification, preference, and aversion in children. <u>Developmental Psychology</u>, 1969, 1, 456-462.
- Lerner, R. M. & Korn, S. J. The development of body build stereotypes in males. Child Development, 1972, in press.
- Lerner, R. M. & Pool, K. B. Body build stereotypes: a cross-cultural comparison. Unpublished manuscript, 1972.
- Lerner, R. M. & Schroeder, E. Kindergarten children's active vocabulary about body build. <u>Developmental Psychology</u>, 1971a, 5, 179.
- Lerner, R. M. & Schroeder, E. Physique identification, preference, and aversion in kindergarten children. <u>Developmental Psychology</u>, 1971b, 5, 538.
- Little, K. B. Personal space. <u>Journal of Experimental Social Psychology</u>, 1965, 1, 237-247.
- Meisels, M. & Canter, F. M. Personal space and personality characteristics: a non-confirmation. <u>Psychological Reports</u>, 1970, 27, 287-290.
- Meisels, M. & Guardo, C. J. Development of personal space schemata. Child Development, December 1969, 40, 4, 1167-1173.
- Sheldon, W. H. The varieties of human physique. New York: Harper, 1940.
- Sheldon, W. H. The varieties of temperament. New York: Harper, 1942.
- Sommer, R. <u>Personal space</u>. Englewood Cliffs, N. J.: Prentice-Hall, 1969.
- Staffieri, J. R. A study of social stereotype of body image in children.

 <u>Journal of Personality and Social Psychology</u>, 1967, 7, 101-104.



Walker, R. N. Body build and behavior in young children. I: Body build and nursery school teachers' ratings. Monographs of the Society for Research in Child Development, 1962, 27, (3, Serial No. 84).

- Walker, R. N. Body build and behavior in young children. II: Body build and parents' ratings. Child Development, 1963, 34, 1-23.
- Wells, W. D. & Siegel, B. Stereotyped somatotypes. <u>Psychological</u> <u>Reports</u>, 1961, 3, 77-78.